

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/759,095	01/20/2004	Kazuhiro Taniguchi	OK1.636	6923	
75	590 06/30/2004		EXAMINER		
VOLENTINE FRANCOS, PLLC Suite 150			SMITH, JOHNNIE L		
12200 Sunrise	Valley Drive		ART UNIT	PAPER NUMBER	
Reston, VA 20191			2881	2881	
			DATE MAILED: 06/30/2004		

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

			N
	Application No.	Applicant(s)	
	TANIGUCHI, KAZUHIRO		
Office Action Summary	Examin r	Art Unit	
	Johnnie L Smith II	2881	
Th MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the c	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by statt Any reply received by the Office later than three months after the mai earned patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a reply be tined in the statutory minimum of thirty (30) dayed will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 20	January 2004.		
2a) ☐ This action is FINAL . 2b) ☑ Th	nis action is non-final.		
3) Since this application is in condition for allow closed in accordance with the practice under	•		
Disposition of Claims			
4) ☐ Claim(s) 1-7 is/are pending in the application 4a) Of the above claim(s) is/are withdom 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-7 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9) ☐ The specification is objected to by the Exami 10) ☑ The drawing(s) filed on 20 January 2004 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre 11) ☐ The oath or declaration is objected to by the	re: a) accepted or b) objected or b) objected or b) objected or displayments. Selection is required if the drawing(s) is objection is required if the drawing(s) is objection.	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a li	ents have been received. ents have been received in Applicationity documents have been receiveau (PCT Rule 17.2(a)).	tion No ved in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summan	v (PTO-413)	
 Notice of References Cited (PTO-992) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/C Paper No(s)/Mail Date <u>0120</u>. 	Paper No(s)/Mail D		

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent publication 2003/0030010 (Perel et al). In reference to claims 1-3, Perel teaches a vaporizer for an ion source for ionizing a solid source of an ion implantation apparatus having a nozzle having a gas inlet port formed in upward orientation located a predetermined distance downward from an upper end of an inner surface of a crucible for vaporizing the solid source therein; and wherein said solid source is arsenic (figure 2, claim 9, paragraph 0009).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Application/Control Number: 10/759,095 Page 3

Art Unit: 2881

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent publication 2003/0030010 (Perel et al). As discussed above, Perel discloses the claimed invention except for a nozzie having a piuraiity of gas iniet ports. It would have been an obvious to one of ordinary skill at the time of the invention to have a plurality of gas ports, since applicant has not disclosed that having two gas inlet ports solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with a singular port as presented above.

Art Unit: 2881

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patents; 6,107,634 (Horsky), 6,593,580 (Miyabayashi), 6,288,403 (Horsky et al), 4,844,006 (Page, Jr et al), 5,322,710 (Visser), 4,908,243 (Page, Jr et al), 5,356,477 (Visser), and US patent publications 2002/0153493 (Miyabayashi), 2001/0054699 (Horsky et al). All of the cited US references contain art similar to that being claimed by applicant, more specifically, methods and apparatuses for ion source vaporizers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnnie L Smith II whose telephone number is 571-272-2481. The examiner can normally be reached on Monday-Thursday 7-4 P.M. and Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/759,095 Page 5

Art Unit: 2881

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Johnnie L Smith II Examiner Art Unit 2881

JLSII

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTEN 2800